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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,137

08/22/2005

Yuuichirou Ogawa

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OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1733

MAIL DATE

DELIVERY MODE

05/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,137

Applicant(s)

OGAWA, YUUICHIROU

Examiner

Justin R. Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 101404.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim, which depends from claim 7, contains the language "said stiffener rubber". However, claim 7 does not require a stiffener rubber and thus, there is a lack of antecedent basis. It is suggested that the claim be changed to depend from claim 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9, 10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (US 6,929,045) and further in view of Cottrell US 2005/0230021). As best depicted in Figures 1 and 2, Ogawa discloses a tire construction having a carcass including a continuous cord and having a plurality of radial cord portions (e.g. 5C) and a plurality of circumferential cord portions (e.g. E). The reference is only devoid of a runflat insert in the sidewall region of the tire. Cottrell

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is similarly directed to a non-conventional carcass structure (one formed of individual cords, as opposed to calendered plies) and suggests the inclusion of an insert at the interior side of said carcass in order to provide tire operation in an underinflated condition (Paragraphs 3 and 4). It is further emphasized that runflat inserts represent a well known and conventionally included rubber layer in tire constructions for the reasons detailed above. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to include a runflat insert in the tire of Ogawa.

Regarding claims 2 and 4, Ogawa depicts an embodiment comprising a pair of split bead cores (4i and 4o), wherein the circumferential cord portions E are below the radially outer surface of the bead cores. Furthermore, the bead core is generally depicted as being directly adjacent the tire bead base and as such, one of ordinary skill in the art at the time of the invention would have expected the bead core to be positioned within the broad range of the claimed invention. Lastly, applicant has not provided a conclusive showing of unexpected results to establish a criticality for a distance less than 5 millimeters, more preferably less than 3 millimeters.

With respect to claim 3, the claim is directed to the method of forming the bead and does not further define the structure of the claimed tire article.

Regarding claims 5 and 6, Ogawa teaches a radial carcass formed of at least one continuous cord (Column 3, Lines 45-50)- one of ordinary skill in the art at the time of the invention would have found it obvious to form the carcass of Ogawa from 3 cords and thus form 3 cord layers absent any conclusive showing of unexpected results.

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Additionally, one would expect a triple contact portion in an analogous manner to the double contact portion depicted in Figure 9.

With respect to claim 7, Figures 1 and 2 clearly depict a carcass having at least one cord layer folded around the split bead core from an axially inner position to an axially outer position.

As to claims 9 and 10, the turnup end can be relatively low (Figure 4) or relatively high (Figure 5), which appear to satisfy the limitations of the respective claims.

Regarding claim 12, while the figures of Ogawa generally depict the circumferential cord portions as having the same radial height, the claim only requires that the respective heights are different. One of ordinary skill in the art at the time of the invention would not have expected the radial heights of the relevant cord portions to be identical (e.g. at microscopic level). It is emphasized that the claims do not require a quantitative relationship between the respective heights- the claims only require that the respective heights differ, even if it is only an extremely small distance. Lastly, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed arrangement.

As to claim 13, the contact portions of Ogawa are in the bead region.

With respect to claim 14, the limitations define the conventional tire components and tire manufacturing methods. One of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Ogawa in accordance to the method of the claimed invention. While Ogawa fails to expressly depict an innerliner, it

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is well recognized that innerliners represent a fundamental component of modern day tubeless tires- one example of such a construction is Cottrell (Paragraph 4).

5. Claims 1, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyoko (US 5,885,387) and further in view of Cottrell (US 2005/0230021). As best depicted in Figure 3, Ueyoko is directed to a tire construction comprising a carcass formed of a continuous cord that has a plurality of radial cord portions (e.g. 11B) and a plurality of circumferential cord portions (e.g. Ri(Li)). The reference is only devoid of a runflat insert in the sidewall region of the tire. Cottrell is similarly directed to a non-conventional carcass structure (one formed of individual cords, as opposed to calendered plies) and suggests the inclusion of an insert at the interior side of said carcass in order to provide tire operation in an underinflated condition (Paragraphs 3 and 4). It is further emphasized that runflat inserts represent a well known and conventionally included rubber layer in tire constructions for the reasons detailed above. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to include a runflat insert in the tire of Ueyoko.

Regarding claims 8 and 11, the tire of Ueyoko includes a stiffener 8. With specific respect to claim 11, the runflat insert has a relatively large cross-sectional area that spans the entire sidewall region (see Cottrell- Figure 1), while the stiffener rubber is a smaller tire component that is positioned in the lower bead region. Given the general dimensions of each component, one of ordinary skill in the art at the time of the invention would have readily appreciated the range of the claimed invention, there being no conclusive showing of unexpected results to establish a criticality for the claimed


values. It is emphasized that the general dimensions of the respective components suggest a relationship on the order of that required by the claimed invention.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Justin R Fischer
Primary Examiner
Art Unit 1733

JRF